

**STATE OF ILLINOIS**  
**ILLINOIS COMMERCE COMMISSION**

<b>Commonwealth Edison Company</b>	:	
	:	
<b>Petition for Approval of Tariffs</b>	:	<b>12-0484</b>
<b>Implementing ComEd's Proposed Peak</b>	:	
<b>Time Rebate Program.</b>	:	

**ORDER**

By the Commission:

**I. PROCEDURAL HISTORY**

This proceeding was initially commenced on August 21, 2012, when Commonwealth Edison Company ("ComEd") filed a Petition with the Illinois Commerce Commission ("ICC" or "Commission") seeking approval of tariffs implementing ComEd's Peak Time Rebate ("PTR") program pursuant to Section 16-108.6(g) of the Public Utilities Act (the "Act").

On February 21, 2013, the Commission entered an Interim Order in this proceeding ("First Interim Order") deciding various contested issues with respect to proposed Rider PTR – Peak Time Rebate ("Rider PTR"). The First Interim Order approved Rider PTR as modified pursuant to Section 16-108.6(g) of the Act, and directed ComEd to file a revised Rider PTR consistent with the conclusions in the First Interim Order; approved the proposed revisions to Rider AC - Residential Air Conditioner Load Cycling Program, Rider POG - Parallel Operation of Retail Customer Generating Facilities, Rider POGNM - Parallel Operation of Retail Customer Generating Facilities With Net Metering, and Rate RESS - Retail Electric Supplier Service, and directed ComEd to file such revised tariffs as approved; identified several unresolved issues, and directed that those issues be addressed in the procedural manner discussed in the First Interim Order; directed the Commission's Office of Retail Market Development ("ORMD") to initiate a workshop process consistent with the directives in the First Interim Order; directed that Rider PTR be amended prior to implementation to include a customer baseline load ("CBL") methodology; and directed ComEd to file its proposed CBL methodology and to develop and file a Direct Load Control ("DLC") pilot program for customers taking service under Rider PTR, after consultation with the Smart Grid Advisory Council ("SGAC"), by February 1, 2014 for Commission review and approval. First Interim Order at 32-3. With respect to including DLC technology in the PTR program, the Commission stated that it would "let the results of the pilot program guide the decision of whether to adopt DLC technology." *Id.* at 30.

On July 30, 2014, following the submission of Phase 2 testimony by ComEd and Staff, the Commission entered its Second Interim Order in this proceeding. The Second Interim Order reviewed and approved ComEd's proposed CBL methodology and DLC Pilot Program; approved the proposed revisions to Rider PTR to include the CBL methodology and the DLC Pilot Program and directed ComEd to file a revised Rider PTR, consistent with the conclusions contained in the Second Interim Order; directed ComEd to file a report reflecting the results of the first year of the DLC pilot in the instant proceeding by the end of 2015, which would constitute the start of Phase 3 of this Docket; directed ComEd to file testimony regarding the evaluation report and whether or not to modify the PTR Program (marketed to customers as the "Peak Time Savings" or "PTS" program) to include DLC technology for PTS participants based on the results of the DLC Pilot on or before April 1, 2016; confirmed that Staff-led workshops were held to discuss and resolve certain issues as directed in the First Interim Order, and all issues raised in such workshops were either addressed and resolved in the workshops, addressed in a separate Commission docket, or do not need to be resolved in the instant proceeding or before the instant proceeding is closed; and confirmed that ComEd complied with the directives in the First Interim Order, including the directives which required ComEd to provide progress reports regarding its customer research into pre-enrollment.

On December 30, 2015, ComEd filed the Peak Time Savings ("PTS") DLC Pilot Measurement & Verification Report ("PTS DLC Pilot Evaluation Report") prepared by Nexant, Inc. On April 1, 2016, ComEd filed the Phase 3 direct testimony and attachment of ComEd witness James C. Eber (ComEd Exs. 10.0 and 10.01).

On April 6, 2016, the Administrative Law Judge ("ALJ"), on her own motion, reopened the record pursuant to Section 200.870 of the Commission's Rules of Practice (83 Ill. Admin. Code 200.870). Pursuant to notice given in accordance with the law and the rules and regulations of the Commission, a status hearing was convened on April 19, 2016 before the ALJ at the Commission's offices in Chicago, Illinois and a schedule was set for filing of Staff and Intervenor Phase 3 direct testimony or affidavits.

On May 24, 2016, Staff filed the Phase 3 affidavit of Staff witness Dr. David Brightwell (Staff Ex. 6.0). On May 27, 2016, ComEd filed the Phase 3 affidavit of Mr. Eber (ComEd Ex. 10.02) verifying his Phase 3 direct testimony.

On May 31, 2016, an evidentiary hearing was convened and counsel for ComEd and Staff appeared. The Phase 3 direct testimony of Mr. Eber was admitted into evidence, and the Phase 3 affidavit of Dr. Brightwell was admitted into evidence. At the conclusion of the hearing on May 31, 2016, the record was marked "heard and taken."

## **II. PTS DLC PILOT EVALUATION REPORT**

The Second Interim Order directed ComEd to "file a report reflecting the results of the first year of the DLC pilot in the instant proceeding by the end of 2015", and to "file testimony regarding the evaluation report and whether or not to modify the PTS Program

to include DLC technology for PTS participants based on the results of the DLC Pilot.” Second Interim Order at 18.

On December 30, 2015, ComEd filed its PTS DLC Pilot Evaluation Report in the instant proceeding. ComEd states that it provided a draft of the report to the parties in the instant proceeding on November 25, 2015, and that a workshop was held at the Chicago office of the Commission on December 7, 2015 to discuss the draft report. ComEd explains that, in response to comments issued by certain parties, it revised its PTS DLC Evaluation Report to reflect 2017 as the initial year for the cost and benefit analysis.

ComEd witness Mr. Eber explains that the PTS DLC Pilot Evaluation Report includes: (1) a description of the PTS DLC pilot design and its implementation, (2) the amount of load reduction achieved during curtailment events called during the summer of 2015, (3) a cost and benefit analysis, and (4) a survey of participants regarding the pilot program. Mr. Eber further explains that the PTS DLC Pilot Evaluation Report provides information on whether offering enabling technology increased PTS enrollment rates, whether the presence of enabling technology increased the load reductions for PTS participants, whether the incremental benefits of the technology offset its costs, and whether the offer of technology increased customer satisfaction.

#### **A. ComEd’s Position**

ComEd states that the PTS DLC pilot design was consistent with the design described in the Phase 2 direct testimony of Mr. Eber, with modifications as suggested by Staff and approved in the Second Interim Order. The pilot design included five customer groups in the pilot program reflecting whether customers were single family (“SF”) with central air conditioning (“AC”) or multi-family (“MF”) with window AC, and whether customers were offered an AC switch/plug in device, a Programmable Communicating Thermostat (“PCT”), or no DLC technology. There were A and B sub-groups in each customer group. Customers in the sub-groups participated in alternate curtailment events to provide a control group and allow a direct measure of the effect of the DLC technology over and above the load reductions that would be obtained from PTS without DLC technology. There was also a sub-group C in the SF central AC switch group that participated in all curtailment events.

To implement the pilot design, ComEd explains that it began sending marketing materials regarding the PTS DLC pilot program to customers with Advanced Metering Infrastructure (“AMI”) meters in October 2014. The original marketing plan called for sending direct mailings to 50,000 customers; 10,000 to each of the five groups. Due to lower than expected acceptance rates in the first two direct mailings, ComEd states that it conducted additional marketing and on an overall basis sent marketing materials to approximately 165,000 customers in seven direct mailings. ComEd also conducted two e-mail marketing campaigns.

ComEd asserts that it ultimately contacted about 168,200 customers. Of these customers, about 98,600 were SF and about 69,600 were MF. The SF customers were randomly assigned to three groups: PTS only, PTS with AC switch, and PTS with PCT. The MF customers were randomly assigned to two groups: PTS only and PTS with plug-in AC device. ComEd sent customers marketing materials about the PTS program and invited customers to participate in the PTS program. For the customers in the technology groups, ComEd sent information offering AC switches (group 2) or PCTs (group 3) to SF customers with central AC, and offering plug-in devices to MF customers with window AC (group 5).

ComEd provides the acceptance rates of customers who responded to ComEd and expressed interest in participating in the pilot programs, and explains that those customers who enrolled in the pilot program are the customers that accepted the offer, met the eligibility requirements, and completed the pilot registration process. ComEd notes that the main reason that customers accepted the offer to enroll, but did not complete the pilot registration process, is because they changed their mind about having the DLC equipment or had technical or installation issues with regards to the DLC equipment. The final numbers for customers that participated in the PTS DLC programs were: 973 (SF with central AC for PTS only), 710 (SF with central AC for PTS with AC switch), 270 (SF with central AC for PTS with PCT), 628 (MF with window AC for PTS only), and 92 (MF with window AC with a plug-in device).

Participants in the SF with central AC switch group were provided Comverge AC switches with free installation. These devices were programmed to cycle the AC off for 50% of the time (i.e., up to 15 minutes every half hour) during a PTS event, and customers were able to over-ride the control. Participants in the SF with central AC and PCT group were offered a \$100 rebate and free installation for three Honeywell PCT options. The PCT device was programmed to effectively cycle the AC off for 50% of the time during a PTS event, and customers were able to over-ride the control. Participants in the MF with window AC with technology group were provided ThinkEco smartAC kits and, if requested by participants, free installation. The plug-in device was connected to the internet and received signals to control the window AC during the PTS events. Customers were able to over-ride the control.

ComEd explains that six PTS events were called during the summer of 2015, from July 23 through September 2. According to ComEd, the average percentage reductions for participants without DLC technology were 8.9% and 8.6%, respectively, for SF with central AC and MF with window AC groups. In contrast, the average percentage reduction for SF with central AC and PCT group was 23.9%, or 2.7 times the average percentage reduction of the SF with central AC but no technology group. Last, the average percentage reduction of MF with window AC and plug-in AC device group was 20%, or 2.3 times the average percentage reduction of the MF with window AC but no technology group.

Mr. Eber also noted that the AC switches installed in the SF with central AC switch group did not perform as intended due to an issue with installation of the switches. As a

result, it was not possible for ComEd to directly estimate the average load reduction of the SF with central AC switch group. Because the PCTs were essentially programmed to perform as an AC switch and also set to provide 50% cycling to the central AC, however, ComEd used the average percentage load reduction result of the SF with central AC and PCT group as an estimate of the average percentage load reduction of the SF with central AC switch group.

ComEd describes the cost and benefit analysis that was performed to evaluate the benefits of including DLC in the PTS program based on the pilot findings, explaining that the cost effectiveness analysis was performed from two perspectives: a total resource cost test ("TRC") and the utility cost test ("UCT"). ComEd asserts that the results of this analysis show that it is cost effective from both TRC and UCT perspectives to offer the PTS program to the SF with central AC with no technology group and not cost effective for the other four groups.

ComEd also states that the PTS DLC Evaluation Report includes a participant survey that was conducted from October 23 to November 16, 2015, and reflects results from 339 participants. The results of this survey demonstrate that participants with DLC technology compared to participants without DLC technology had significantly higher satisfaction with the PTS program overall. The survey results show that 82% of customers with DLC technology versus 71% of customers without DLC technology rated customer satisfaction at 8-10 on a 0-10 scale. The customers with DLC technology were also significantly more likely to recommend the program to family and friends. The survey results show that 86% of customers with DLC technology versus 75% without DLC technology rated the likelihood of recommending the program to others 8-10 on a 0-10 scale.

According to ComEd, the results of the PTS DLC Pilot Evaluation Report demonstrate that the cost of the technology would outweigh the benefits of the technology. ComEd acknowledges that there are two major benefits of offering DLC technology to PTS participants, including that (1) participants with the technology offers would be more satisfied with participating in the PTS program and more likely to recommend it to family and friends than the participants without DLC technology, and (2) participants with technology offers would increase the load reductions during PTS events more than participants without DLC technology. However, ComEd concludes, the cost-effectiveness analysis provided in the evaluation report shows that utility provision of DLC technology is not cost-effective at this time based on current costs, benefits, and demand reductions. ComEd asserts that the sensitivity analysis based on the PTS DLC pilot results shows that, even with 20% higher benefits or 20% lower costs, only the SF with central AC switch group is cost effective, while the SF with central AC and PCT group and the MF with window AC and plug in device group remain cost ineffective. For these reasons, ComEd recommends that the Commission find that it is not cost effective for the utility to provide DLC technology to PTS participants, and that the PTS Program should not be modified to include the provision of that technology at this time.

While ComEd did not recommend modifying the PTS Program to include utility provision of DLC technology, it explains that it recently and separately filed with the Commission tariff revisions that make available smart thermostat control services for customers that participate in the PTS program and for customers taking service under Rider AC – Residential Air Conditioner Load Cycling Program (“Rider AC”), beginning with the summer of 2016. See Commonwealth Edison Company, ILL C.C. No. 10, 5<sup>th</sup> Revised Sheet No. 335 – Original Sheet No. 337.3 and 4<sup>th</sup> Revised Sheet No. 351 – 4<sup>th</sup> Revised Sheet No. 355. Under those provisions, ComEd will control the thermostats of customers that provide their own smart thermostats (i.e., the PCTs of customers when they participate in the PTS and Rider AC programs). ComEd proposed to offer the smart thermostat control service to PTS customers due to the significant increase in load reduction and the high customer satisfaction with the PTS program experienced by DLC Pilot customers with DLC technology. The Commission voted to not suspend these tariff revisions at its May 4, 2016 regular open meeting and became effective May 9, 2016.

### **B. Staff and Intervenors’ Position**

The Phase 3 affidavit of Staff witness Dr. Brightwell states that Staff does not disagree with ComEd’s recommendation that the PTS Program not be modified to include an offer of DLC technology at this time. No intervenor in this proceeding filed a Phase 3 testimony or affidavit.

## **III. COMMISSION ANALYSIS AND CONCLUSION**

The Commission’s Second Interim Order directed ComEd to file a report reflecting the results of the first year of the DLC pilot in the instant proceeding by the end of 2015, to provide Staff and Intervenors with an opportunity to comment on the report before it was filed, and to file testimony by April 1, 2016, in Phase 3 of this proceeding regarding the evaluation report and whether or not to modify the PTS Program to include DLC technology for PTS participants based on the results of the DLC Pilot. Based on the record in this matter, the Commission finds that ComEd has complied with the directives in the Second Interim Order.

ComEd circulated a draft DLC Pilot evaluation report to Staff and Intervenors, conducted a workshop regarding the draft report, provided Staff and Intervenors with an opportunity to comment on the draft report before it was filed, and duly filed the evaluation report in compliance with the Commission’s directives. In addition, ComEd’s Phase 3 testimony was duly filed on April 1, 2016, and provided a full description and evaluation of the DLC Pilot program, as well as an analysis and recommendations regarding the cost-benefit analysis and the merits of providing DLC technology for PTS participants based on the results of the DLC pilot. ComEd’s PTS DLC Evaluation Report, along with its Phase 3 Direct Testimony, has provided the Commission detailed information on the DLC Pilot results that provides an adequate basis for the Commission’s review of whether to modify the PTS Program to include DLC technology for PTS participants.

ComEd has provided evidence that the provision of DLC technology to PTS participants is not cost-effective at this time. Staff reviewed the PTS DLC Pilot Evaluation Report and ComEd's Phase 3 testimony, and concluded it has no basis to disagree with ComEd's recommendation that the PTS Program should not be modified at this time. No other parties have provided evidence, either through filed testimony or affidavits. As a result, the Commission finds that the record shows that there is no basis at this time to order that ComEd's PTS Program be modified to include provision by the utility of DLC technology.

There are no other issues that remain or need to be decided in this proceeding. The Commission notes that consistent with Section 16-108.6(g) of the Act, 220 ILCS 5/16-108.6(g), Rider PTR provides that ComEd shall "submit a report to the ICC no later than September 1 each year, beginning in 2016, that provides an evaluation of the implementation, operation, and administration of the provisions of [Rider PTR] during the previous PJM Planning Year" and that "[t]he report submitted by [ComEd] in 2019 must be accompanied by a petition that requests the ICC to initiate a proceeding to determine what, if any, net benefits to residential retail customers have been achieved through the operation of this rider, and as a result of such determination, to conclude if this rider should remain in effect with no modification, remain in effect with modification, or be terminated." Commonwealth Edison Company, ILL. C.C. No. 10, 4th Revised Sheet No. 355 (Canceling 3rd Revised Sheet No. 355).

#### **IV. FINDINGS AND ORDERINGS PARAGRAPHS**

The Commission, having given due consideration to the entire record herein and being fully advised in the premises, is of the opinion and finds that:

- (1) Commonwealth Edison Company, an Illinois corporation engaged in the business of furnishing electric service in the State of Illinois, is a public utility within the meaning of Section 3-105 of the Public Utilities Act;
- (2) the Commission has jurisdiction over Commonwealth Edison Company and the subject matter herein;
- (3) the recitals of fact and conclusions of law reached in the prefatory portion of this Order are supported by the evidence of record and are hereby adopted as findings of fact and conclusions of law;
- (4) Commonwealth Edison Company provided its Peak Time Savings Direct Load Control Evaluation Report to Staff and Intervenors, and further provided Staff and Intervenors with an opportunity to comment on the report before it was filed;
- (5) the Peak Time Savings Direct Load Control Evaluation Report filed by Commonwealth Edison Company in this proceeding is detailed and provides an adequate basis for the Commission to evaluate the merits of

utility-provided Direct Load Control technology for Peak Time Savings participants;

- (6) the provision of Direct Load Control technology to Peak Time Savings participants is not cost-effective at this time and Commonwealth Edison Company's Peak Time Savings Program should not be modified to include an offer of Direct Load Control technology for Peak Time Savings participants; and
- (7) Commonwealth Edison Company has complied with the directives in the Second Interim Order.

IT IS THEREFORE ORDERED by the Illinois Commerce Commission that the Peak Time Savings program will not be modified to include the provision of Direct Load Control technology to Peak Time Savings participants.

IT IS FURTHER ORDERED that all motions, petitions, objections, and other matters in this proceeding which remain unresolved are to be disposed of in a manner consistent with the conclusions herein.

IT IS FURTHER ORDERED that, subject to the provisions of Section 10-113 of the Public Utilities Act and 83 Ill. Adm. Code 200.880, this Order is final; it is not subject to the Administrative Review Law.

By Order of the Commission this 20th day of July, 2016.

(SIGNED) BRIEN SHEAHAN

Chairman